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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/654,615	05/29/96	SHRIVASTAVA	R AINC-3310

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D1M1/0920

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ART UNIT

PAPER NUMBER

1107

DATE MAILED:

09/20/96

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

Office Action Summary

Application No.

08/654,615

Applicant(s)

Shrivastava

Examiner

H. Jey Tsai

Group Art Unit

1107



- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 6-9 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 6-9 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Claim Rejections - 35 USC § 112

Claims 6-9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, line 41, "conductive floating gate" lacks proper antecedent basis. Change to "conductive gate" is suggested.

The reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims are not conventional.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fazan et al..

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Fazan et al. discloses a method of forming a capacitor on the semiconductor substrate, which includes :

forming gate structure 12 including polysilicon layer 22, silicide layer 23 and dielectric layer 24, fig. 6 and col. 4, lines 1-49,

forming a dielectric sidewalls spacer 26 on the gate structure and on the gate dielectric layer,

forming a layer of second dielectric layer 41 dielectric layer 24 and extending over the drain and source regions such that second dielectric layer 41 is separated by the gate dielectric layer in source/drain regions,

forming a contact trench in the second dielectric layer 24 having first edge aligned over the conductive gate electrode and partially defined by the spacer 26 and a second edge over the source region and exposing the source region,

forming a conductive lower capacitor electrode 61 to cover the first and second edges in the contact trench,

forming capacitor dielectric layer and to plate electrode.

Note, Fazan et al., col. 3-4.

Specification

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The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Field of Search

This office action has been created under the Patent and Trademark Office Semiconductor Technology Quality Assurance Pilot Program. It incorporates the examination quality standards set as a result of customer focus sessions with the semiconductor industry. The listing of the field of search to follow is one of these standards.

Field of Search

Date

U.S. Class and subclass: 437/47/52/60/919

09/16/96

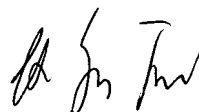
Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. Jey Tsai whose telephone number is (703) 308-1374. The examiner can normally be reached on from 7:00 Am to 4:00 Pm., Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (703) 308-3325. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0662.

hjt

09/16/96



H. Jey Tsai
Patent Examiner
Patent Examining Group 1100